

Patent Claims

1. A dry additive for hydraulic binder, characterized in that a liquid additive (1) is disposed in a microporous carrier (2).
2. The dry additive as claimed in claim 1, characterized in that the liquid additive (1) is a liquefier, accelerator, retardant, antifoaming agent, shrinkage reducer or a corrosion inhibitor.
3. The dry additive as claimed in claim 2, characterized in that the liquid additive (1) is a corrosion inhibitor, in particular an alkanolamine, an alcohol, an organic acid or a phosphonate, preferably mono-ethanolamine.
4. The dry additive as claimed in one of claims 1 to 3, characterized in that the microporous carrier (2) is a molecular sieve, in particular zeolites, preferably a zeolite A, Linde Type A (LTA).
5. The dry additive as claimed in claim 4, characterized in that the microporous carrier (2) is present in powder form, in particular with a mean particle diameter of less than 100 micrometers, preferably between 100 and 10 micrometers, most preferably between 50 and 25 micrometers.
6. The dry additive as claimed in one of claims 1 to 5, characterized in that the microporous carrier has a pore diameter between 3 and 10 Angström, preferably between 4 and 8 Angström.
7. The dry additive as claimed in one of claims 1 to 6, characterized in that the carrier (2) loaded with the liquid additive (1) has a storage stability of more than one year.

8. A hydraulically setting composition (3) containing a dry additive as claimed in one of claims 1 to 7 and a hydraulic binder.

5 9. The hydraulically setting composition as claimed in claim 8, characterized in that the hydraulic binder contains a cement, in particular a Portland cement.

10 10. The hydraulically setting composition as claimed in claim 8 or 9, characterized in that the storage stability is as long, or at least 90% as long, as that of the corresponding hydraulically setting composition without the dry additive as claimed in  
15 claim 1 to 7.

11. The hydraulically setting composition as claimed in one of claims 8 to 10, characterized in that the hydraulically setting composition is a ready-mixed  
20 mortar, a repair mortar, a dry-mix mortar or a concrete.

12. A cured hydraulic composition obtained by the curing of a hydraulically setting composition as  
25 claimed in one of claims 8 to 11 by means of water.

13. A process for the release of a liquid additive from a dry additive as claimed in one of claims 1 to 7, characterized in that the dry additive is brought into  
30 contact with water.

14. A use of a dry additive as claimed in one of claims 1 to 7 in a composition which contains a hydraulic binder.  
35

15. A process for the production of a dry additive as claimed in one of claims 1 to 7, characterized in that a liquid additive is mixed into a microporous material and stirred.

16. A process for the rehabilitation of a cured hydraulic composition (3a) comprising the steps

- 5 a) mixing of a hydraulically setting composition as claimed in one of claims 8 to 11 with water,
- b) release of the liquid additive,
- c) application of the hydraulic composition mixed with water onto the cured hydraulic composition (3a),
- 10 d) migration of the liquid additive into the cured hydraulic composition (3a),

wherein the steps b) and c) can also take place at the same time or in reverse order.

15 17. The process for rehabilitation as claimed in claim 16, characterized in that the liquid additive is a corrosion inhibitor, in particular an alkanolamine, an alcohol, an organic acids or a phosphonate.

20 18. The process for rehabilitation as claimed in claim 16 or 17, characterized in that the cured hydraulic composition (3a) contains reinforcing iron (4).

25 19. The process for rehabilitation as claimed in claim 18, characterized in that the corrosion inhibitor migrates through the cured hydraulic composition (3a) and is absorbed onto the reinforcing iron.